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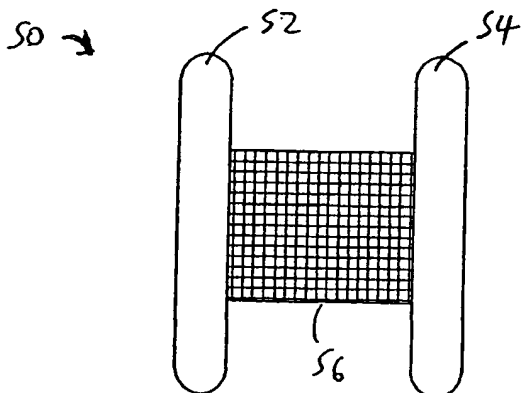
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ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.*

(54) Title: SEPTAL OCCLUDER AND ASSOCIATED METHODS

(57) Abstract: Devices are provided for closing septal defects  
such as PFOs. The devices generally include a proximal anchor  
member (52), a distal anchor member (54), and a flexible  
center joint (56) connecting the two anchor members.



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# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/40850

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61B 17/08

US CL : 606/215

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 606/215-217, 213, 232, 151, 157

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6,113,609 A (ADAMS) 05 September 2000, Column 4, lines 17-23, 37-4061-65; Column 5, lines 7-17; Figures 1, 6, 7.	1, 2, 4, 7, 8, 9, 10, 12, 13, 15, 20, 44, 55-58, 63, 94, 96,
X	US 5,861,003 A (LATSON et al.) 19 January 1999, Figures 3 & 6; Column 4, lines 33-65.	44, 46, 49, 52, 55-58, 82, 85-88, 91, 92, 96
Y		1, 2, 4, 7-10, 12-15, 67, 93, 94,
A, P	US 6,494,888 B1 (LAUFER et al.) 17 December 2002,	
A, P	US 6,387,104 B1 (PUGSLEY, JR. et al.) 14 May 2002.	
Y	US 5,810,884 A (KIM) 22 September 1998; Figures 19-22.	25, 26, 33-35, 38-42
X	US 5,993,475 A (LIN et al.) 30 November 1999; see Abstract, Column 2, lines 25-40, Fig. 2.	1, 44

☒ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

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"A" document defining the general state of the art which is not considered to be of particular relevance

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"P" document published prior to the international filing date but later than the priority date claimed

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"X"

document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&"

document member of the same patent family

Date of the actual completion of the international search

18 April 2003 (18.04.2003)

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## INTERNATIONAL SEARCH REPORT

## C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,976,174 A (RUIZ) 02 November 1999; Figures 1B, 2, 4.	44, 96
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Y		94
Y	US 6,077,291 A (DAS) 20 June 2000; Figures 9, 10, 12.	1-4
Y, P	US 6,379,368 B1 (CORCORAN et al.) 30 April 2002; Column 8, lines 13-52.	78-81
X	US 6,214,029 B1 (THILL) 10 April, 2001; Figures 11, 12; Column 3, lines 17-28, Column 5, lines 62-65, Column 9, lines 25-33.	78, 80
X	US 6,206,907 B1 (MARINO et al.) 27 March 2001; Column 6, lines 63-67, Fig. 7.	78

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/40850

## Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claim Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claim Nos.:  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claim Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:  
Please See Continuation Sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

☐  
☐

The additional search fees were accompanied by the applicant's protest.

No protest accompanied the payment of additional search fees.

# INTERNATIONAL SEARCH REPORT

PCT/US02/40850

## BOX II. OBSERVATIONS WHERE UNITY OF INVENTION IS LACKING

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees must be paid.

Group I, claim(s) 1-77 and 82-99, drawn to a septal occluder .

Group II, claim(s) 78-81, drawn to a process of retrieving a deployed septal occluder.

The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The special inventive feature in Group I is the flexible connection member, whereas the special inventive feature in Group II is the combination of steps in the process of retrieving a deployed septal occluder.